

## THE MINES OF ARIZONA

This department is under the direction of Mr. W. E. Defty, the well known mining engineer, who will carefully scrutinize all matters relating to mining in order that only reliable information regarding legitimate enterprises shall find a place here.

The Republican would be pleased to receive information from any part of the state regarding the development of the mining industry. All communications should be addressed: Mining Department, Arizona Republican.

### Settlement of the Strike

The strike at Miami and Globe district were pleased to state has been amicably settled and the men returned to work last Monday. After several conferences between the men and employees the following sliding scale was adopted:

The miners and holding engineers will work on a sliding scale.

There is to be no discrimination against any of the men on account of the strike.

The scale is as follows: Machinists, electricians, carpenters and boiler-makers, \$4.25. Miners, minimum wage, \$2.50. With copper at 13 cents; \$3.65 with copper at 14 cents; \$3.75 with copper at 15 cents.

Holding engineers, with copper at 15 cents, \$1.25 on single drum hoist, \$4.50 on double drum; firemen \$3.75, others \$2.50, pumpmen \$4.00. With copper at 14 cents they will receive a raise of 15 cents, and with copper at 15 cents another ten cents a day will be added to the wages.

Laborers, \$2.00 per day.

The Copper Queen, Chalcote & Arizona, and Shattuck, Arizona, announce similar schedules to become effective February first.

### Tom Reed

The clean up for the Tom Reed mine during December was \$115,000 gold. This wonderful property paid 65 per cent on the par value of the stock, in dividends last year and it has paid continuously for several years from 68 to 72 per cent and it is claimed still has at least ten years of the same enormous dividends blocked out and in sight.

### Railroad to the Mascot

Construction of a railroad to this property near Wilcox, Cochise county, was commenced last Wednesday. The property is about twenty-five miles from Wilcox and has been under development for a number of years, and a large amount of money has been expended. The railroad is mainly constructed to facilitate the shipment of the large tonnage of low grade ores already blocked out.

### Phelps-Dodge Co. Declare Dividends

The dividends declared by the Phelps Dodge company a few days ago was \$1 a share more than was paid by the company three months ago, but \$1.50 a share less than was paid by the company for the corresponding quarter a year ago. The total disbursements for the year 1914 will amount to \$14 per share, as compared with \$16.50 in 1913, \$15 in 1912 and \$12 for each of the preceding three years.

### Shattuck & Arizona

The Shattuck & Arizona has just declared a dividend does not necessarily imply the company has resumed regular quarterly disbursements, as some eastern papers assume. The company had the money to spare

for current dividends and it's expected future dividend action will be governed by conditions. The present dividend is 50c per share payable February 26th to stock of record January 30. This dividend is the first since July last when 50c was also paid.

### U. S. Geographic Surveys

The area of topographic surveys completed by the United States Geological survey in the year ending June 30, 1914, was 23,928 square miles. The total area topographically surveyed in the United States to that date was 1,197,152 square miles, or 23.6 per cent of the entire country.

### Good, Just So!

They say the mining days are going to return, that the boom is on us now and that mineral values are to have their chance again. This is good news. Wealth from the hills is clean and it has the added virtue of being original. It comes nearer being something for nothing than this world ever realizes in any other line.

### Ore Rates to Globe Materially Reduced

Material reduction in the rates on ores, concentrates and sulphates from all points on the Southern Pacific and Arizona Eastern to Globe and Miami were ordered last week by the corporation commission. These reductions amounting in some cases to over 50 per cent, are to become effective on one day's notice.

### Mineral on the Menu at the Hotel Adams

Two of us were conversing in the rotunda of this popular caravansary, when out of the dining room came an old time Colorado mining man. Addressing us he said: "This is the only hotel that I ever saw have mineral on its bill of fare."

We hit, "Well," he says, "they describe some portion of food (or) some other portion. One takes their choice."

We looked around for the official burglar of the hotel but he couldn't be found and the Coloradoan had left before we could J. C. Adams and tell him to lead his gun.

### Gypsum

Regarding this subject last week the large deposit spoken of has been known for a number of years, but has only been located in recent years. We were cognizant of it and an article appeared in reference to it in the mining columns of The Republican on February 16, 1913, a reprint of which follows:

The present company acquiring the property has been formed mainly to get all the holdings together, survey and perfect the titles and induce capital to invest for the purpose of shipping the material as a fertilizer and eventually to erect machinery and manufacture products of which the mineral forms an important part. There is little doubt but what sufficient capital will be forthcoming as soon as the important and possibilities of the deposit is fully recognized.

### Quicksilver Production in 1914

The domestic production of quicksilver in the United States in 1914, was 16,568 flasks of 75 pounds each, valued at the average domestic price for the year at San Francisco (approximately \$10 a flask), at \$1,656,800. A comparison of these figures compiled by H. D. McCaskey, of the United States Geological Survey, with the survey's statistics of production of 1913, shows a decrease of 3,645

flasks in quantity and of \$1,329 in value for the output of 1914.

There were 33 mines and prospects producing quicksilver in 1914, of which 23 were in California. In 1913 there were 24 producers, of which 18 were in California.

### Market and Prices

The domestic quicksilver market was unfavorable and the prices very low during the first seven months of 1914, but upon the outbreak of the European war the prices jumped and producers in a position to profit were encouraged to make their maximum output. The average San Francisco domestic market price was \$49.23 a flask of 75 pounds for the year 1913, against \$42.95 in 1912 and \$46.91 in 1911. In 1914 the following monthly average prices were recorded in San Francisco: January, \$39.25; February, \$39; March, \$39; April, \$38.99; May, \$39; June, \$38.60; July, \$37.50; August, \$39; September, \$37.25; October, \$38; and November, \$35. It is estimated that the average for December will be about \$35. The average price for the year will therefore be about \$39—the highest since 1906. The total productive capacity of the quicksilver mines of this country at present known is by no means unlimited, and although high prices may bring spurts of activity and new ore bodies may at any time be discovered, the present outlook is not for excessive production. These facts, and the present improbability of excessive importation, indicate high prices throughout the war, at least.

### Imports and Exports

Exports of quicksilver from the United States for the calendar year 1914, are estimated at 33,900 pounds, or 452 flasks, valued at about \$1,750,000. In 1913 the exports were \$1,149,000, valued at \$43,574. The imports entered for consumption are estimated for 1914 at 65,504 pounds, or 8,734 flasks, valued at \$299,000, against 171,653 pounds, valued at \$73,361, imported in 1913. The imports come mainly from Europe. The largest imports of the year were made before the war began, and preliminary figures indicate steadily declining imports in the latter half of the year. It has been generally understood that the nations at war have not permitted exportation of metals, but it has been reported that two lots of about 1,000 flasks each have been received at New York from Italy since the outbreak of the war. Such importations naturally tend to lower domestic prices and may prevent American producers from taking full advantage of the rise in price they have been counting upon to offset the long period of low prices and depression through which they have recently passed. Of the other European producers Austria is engaged in conflict and the Italian mines (controlled by the government) may be unable to export to this country, even through neutral Italian ports. The great Spanish mines of Almaden are controlled by English capital and normally send their output to London for distribution. Whether any large amount of this supply will be permitted to leave the United Kingdom under present conditions remains to be seen. Even if the embargo upon exportation is lacking, it must be considered that London prices have risen also, that danger to navigation is by no means removed, and that marine insurance must continue to increase costs of transportation. Large imports of foreign metal are therefore not expected at the present outlook.

### Increase in Gold Mining

The gold mining industry of the United States had a prosperous year in 1914 and regained its normal condition, inasmuch as early returns indicate an output greater by nearly \$1,000,000 than that of 1913. Mr. H. D. McCaskey, of the U. S. Geological Survey, who is authority for these figures, adds that the production in 1913 was lower than for several years past and even in 1914 the output was considerably below that of any year in the period 1908-1912, when the high-water mark was reached. For 1914 the preliminary figures of the United States Geological Survey and the Bureau of the Mint indicate a total gold yield of \$92,823,509.

In Alaska the output of gold increased about \$200,000, the industry was generally prosperous, and a large amount of dead work continued to be done preparatory to increased output from lode mines. The placer yield was about \$10,700,000, or the same as in 1913, and increases made in the Ruby, Stewart Peninsula, Iditarod, and Hot Springs districts offset declines in output from Fairbanks and other camps. Abundant rainfall favored placer mining. About 26 gold-lode mines produced about \$5,100,000 in 1914, against \$4,814,813 from 20 mines in 1913. Juneau, including the Treadwell and the great new Alaska-Juneau, Alaska-Gastineau, and other mines, continued to be the most important lode district. In Arizona the mine production of gold increased about \$500,000 in 1914. The chief producers, the Tom Reed, Gold Road, Vulture and Common-wealth mines, were active and produced more than half the total yield the remainder coming largely from copper ores.

In California the mines produced over \$700,000 more than in 1913. The Grass Valley, Mother Lode, and other quartz mines continued active producers at depth, and the placer output, especially from the large dredging operations, was again large. The dredges alone produced 40 per cent of the total gold yield and over 90 per cent of the total placer output.

Colorado mines increased their yield by over \$1,500,000 above that of 1913, the greater part of this increase, or \$1,142,000, being made in the Cripple Creek district, where the mines and mills had another active year. Lake County (chiefly Leadville) made an important increase in gold output also, and smaller increases were made in Ouray and Dolores counties of the San Juan region, and in Boulder, Chaffee, Clear Creek, Summit, and Eagle counties. The gold yield declined somewhat in San Juan, San Miguel and La Plata counties, of the San Juan region, and in Mineral County (Creede).

In Idaho the mine output decreased over \$250,000, owing largely to

the small output of the De Lamar mine, but the dredges in Lemhi and Boise counties had a prosperous year.

In Montana the mine yield increased over 14 per cent and the total production was about \$4,000,000, or more than for any year since 1906. The placers and the Southern Cross and North Moccasin mines enjoyed an active year.

Nevada mines showed a decrease of about 4 per cent, or over \$400,000 in gold output in 1914. The yield at the great Goldfield camp alone declined by over \$1,000,000, but this decrease was offset by increased yield from Tonopah, Fairview, Wonder, Round Mountain, National, Seven Troughs, and other camps. At Manhattan the output declined about 40 per cent.

In New Mexico the mine production increased nearly \$300,000; but in Oregon the output declined about \$200,000.

In South Dakota the mine output was normal. The great Homestake mines and mills were operated through the year, treating a slightly increased tonnage of slightly lower grade. The Golden Reward, Mogul, Trojan, Reliance, Wasp No. 2, and other mines and mills were generally active.

In Utah the mine output of gold decreased about 7 per cent, or over \$250,000, in 1914. The yield was principally from copper ores. The output from true gold ores has declined since the suspension of operations at Mercur. The Philippine production has steadily increased and in 1914 passed the \$1,000,000 mark.

California again retains first rank in gold production in 1914, followed in order by Colorado, Alaska, Nevada, and South Dakota, as in 1913. Arizona and Montana have both

passed Utah, however, which dropped to eighth place in 1914. As stated in the Geological Survey Press Bulletin one year ago, increased output of gold on any large scale is hardly to be expected from any of the states from the present outlook, and unless the great low grade deposits of the Juneau district, in Alaska, now being prepared for large yield, step into the breach, or new discoveries are made elsewhere, the future domestic gold yield may show further decline from the high figures of recent years. Undoubtedly discoveries will be made, for much territory remains for the patient examination and re-examination, but the importance of such discoveries is necessarily beyond prophecy.

According to estimates from the records of the Bureau of Foreign and Domestic Commerce, the imports in 1914 comprised gold valued at \$58,122,990 and the exports were valued at \$242,711,000. The excess of exports over imports was therefore about \$184,588,000, against an excess of \$28,093,778 in 1913. The gold imported in 1914 was, as usual, in ore, bullion, and coin; \$35,759,000 came from Canada and the remainder chiefly from Japan, Mexico and Central

South America. The exports, which were of special interest in 1914, were about \$113,512,000 to Canada, \$92,323,000 to France, and \$31,116,000 to England, and were mainly in United States coin and fine bars.

### Caveat Emptor

In every mining boom you will find the promoter. Often you will find him masquerading under the guise of a broker. During the coming year there will be hundreds, perhaps thousands, of new promotions. Already the vanguard is with us. We would issue a word of warning to our readers about promotions.

For every good, honest and legitimate promotion, there are a thousand spurious ones. It is not at all easy to detect the wheat from the chaff. The pitfalls are well laid, more especially if the broker with whom you do business is promoting something. He is very much akin to the salesman, who, not carrying standard brands of goods, offers you something "just as good."

Very often the promoter, to sell his wares—and make his profit—will go out of his way to derogate the value of proven investments of sterling worth to induce you to dispose of them, in order that you may realize funds to buy his wares. He is cunning, and may catch you unawares.

We, therefore, issue a word of warning to mining security buyers, and present holders of securities. Do not buy a promotion until you have examined every detail, physical, financial, corporate, until you have investigated the men behind the promotion, until you have satisfied yourself that it is honest in every respect.

The editor of The Outlook offers the benefit of long experience in mining securities affording to the readers of this publication, on the subject of any promotion. There are things he can see that you may overlook. The "jokers" are cleverly hidden, and a little impersonal, honest advice on any promotion that you contemplate buying may help to avoid a spurious or ill-advised investment.

### Inspiration Co. Spent \$6,674,286 in Development and Construction Work at Concentrator City up to October 31, 1914

BOSTON, Mass., Dec. 31.—The Boston News Bureau says: The Inspiration Consolidated Copper company has spent in excess of \$6,000,000 in development and construction. Up to Oct. 31 it had actually expended \$6,674,286, as follows:

Property ..... \$ 547,873  
Construction ..... 2,255,815  
Mine development ..... 2,289,870  
Mine equipment ..... 304,762  
General equipment ..... 185,965

These figures have been given by the New York stock exchange in connection with listing of the company's bonds.

Funds already provided will be ample to complete development work and put the company on an operating basis which it is believed will not be more than two months from the end of 1914, as originally estimated. This would put the company in the producing ranks during the first quarter of the new year.

Churn drilling has shown the following tonnage of ore:

	Tons Grade	Pct.
Original development	45,000,000	2.00
Developed, 1913	6,500,000	1.33
Originally developed but not reported	37,875,000	1.26
<b>Total</b>	<b>89,375,000</b>	<b>1.54</b>

Practically all the improvements and construction for which the new bonds were issued have been completed. Of the \$4,500,000 convertible bonds offered stockholders for subscription, \$1,887,800 were taken by them and the balance, \$2,612,200 were taken up by the underwriters, J. P. Morgan & Co.

On Oct. 31 the company had cash totaling \$2,195,231, while there was due as third installment on bonds \$825,776 and due from sundry debtors \$429,414. Current liabilities totaled \$299,456.

### Tungsten Ores in 1914

The production of tungsten ores in the United States during 1914 is estimated as equivalent to about 990 short tons carrying 60 per cent of tungsten trioxide (WO<sub>3</sub>), according to preliminary figures collected by Frank L. Hess, of the United States Geological Survey, which are thought to be accurate within 5 per cent. This output is the smallest since 1908, when only 671 tons was produced. In 1913 the production was 1,537 tons, of which 953 tons was ferberite from the Boulder field in Colorado, a quantity almost equal to that of the whole country in 1914, but the production of the Boulder field in 1914 was only 466 tons. Prices ranged from \$6.50 to \$9 a "unit" (that is, so much a short ton for each per cent of tungsten trioxide), depending on the quality and quantity of the ore and the urgency of the buyers' and sellers' needs.

Of the various tungsten minerals, the one produced in largest quantity was scheelite. From the Ajoa district, in the Mohave Desert, Cal., a little scheelite was also mined in the Deep Creek Mountains, Utah. Small quantities of both wolframite and hubnerite were shipped from Arizona, and hubnerite was produced on Patterson Creek, in the Blue Wing district, Idaho. Some wolframite was produced near Panasco, N. Mex., and in the Clark Mountain district, near Ivanpah, Cal.

The more easily mined tungsten ores which lie close to the surface are now largely worked out in the Idaho districts, and mining is thus becoming more difficult and expensive. This is especially hard on the small operator.

The European war disturbed tungsten mining, as it did most other lines of business, and has had much to do with the reduced output, but the imports of ore, tungsten, and ferrotungsten, as shown by figures collected by the Bureau of Foreign and Domestic Commerce, have been affected even more. During the year 267 tons of ore, valued at \$139,697, were imported, against 491 tons, valued at \$213,123, in 1913. During 1913 661 tons of tungsten metal and ferrotungsten, valued at \$355,212, were imported. In 1914 these imports dropped to 192 tons, valued at \$219,-



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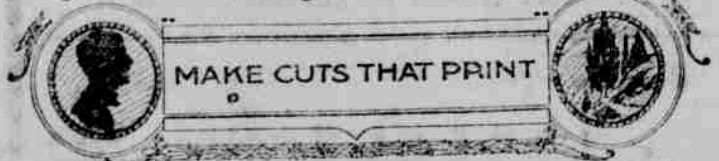
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